

Appln. Serial No. 09/881,464
Amendment Dated November 10, 2004
Reply to Office Action Mailed September 21, 2004

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 1. (Previously Presented) A shield assembly for a connector that is connected to a
2 port of a chassis, a cable extending from the connector, the shield assembly comprising:
3 an electrically conductive cover defining a chamber to enclose the connector;
4 an attachment mechanism adapted to attach the cover to the chassis;
5 an electrically conductive gasket electrically contacted to the cover and adapted to
6 be placed between the cover and chassis; and
7 a cable engagement body having an opening with a width less than a width of the
8 chamber, the opening adapted to surround an outer surface of a portion of the cable.

1 2. (Cancelled)

1 3. (Original) The shield assembly of claim 1, wherein the cable engagement body
2 comprises a neck portion extending from the cover.

1 4. (Original) The shield assembly of claim 1, wherein the cable engagement body is
2 integrally formed with the cover.

1 5. (Original) The shield assembly of claim 4, wherein the cable engagement body
2 has an outer width that is less than an outer width of the cover.

1 6. (Original) The shield assembly of claim 1, wherein the cable engagement body
2 comprises an inner surface defining the opening, and wherein the width of the opening is
3 substantially the same as a width of the cable to enable the inner surface of the cable engagement
4 body to contact an outer surface of the cable.

Appln. Serial No. 09/881,464
Amendment Dated November 10, 2004
Reply to Office Action Mailed September 21, 2004

1 7. (Original) The shield assembly of claim 6, wherein the cable engagement body is
2 formed at least in part of an electrically conductive material to enable the cable engagement body
3 to be capacitively coupled to a shield of the cable.

1 8. (Previously Presented) A shield assembly for a connector that is connected to a
2 port of a chassis, a cable extending from the connector, the shield assembly comprising:
3 an electrically conductive cover defining a chamber to enclose the connector;
4 an attachment mechanism adapted to attach the cover to the chassis; and
5 a cable engagement body having an opening with a width less than a width of the
6 chamber, the opening adapted to surround an outer surface of a portion of the cable,
7 wherein the cable engagement body comprises an inner surface defining the
8 opening, and wherein the width of the opening is substantially the same as a width of the cable to
9 enable the inner surface of the cable engagement body to contact an outer surface of the cable,
10 wherein the cable engagement body comprises an electrically conductive element
11 adapted to pierce through an outer jacket of the cable to enable electrical connection between the
12 cable engagement body and a shield of the cable.

1 9. (Original) The shield assembly of claim 1, wherein the opening has a
2 predetermined length, the opening adapted to surround the outer surface of the portion of the
3 cable along the predetermined length.

1 10. (Original) The shield assembly of claim 1, wherein the opening has a cross-
2 sectional shape selected from the group consisting of generally circular, oval, rectangular, and
3 square.

1 11. (Original) The shield assembly of claim 1, wherein the opening has a cross-
2 sectional shape that forms a closed polygon.

1 12. (Cancelled)

Appln. Serial No. 09/881,464

Amendment Dated November 10, 2004

Reply to Office Action Mailed September 21, 2004

1 13. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 cable engagement body comprises a neck portion having an outer width that is less than an outer
3 width of another part of the shroud.

1 14. (Currently Amended) A connector assembly for mating with a port in a chassis,
2 comprising:
3 a connector having a housing formed of an electrically conductive material, the
4 connector adapted to mate with the port;
5 a cable extending from the connector, the cable having a shield, wherein the
6 connector housing is electrically connected to the shield of the cable; [[and]]
7 a shroud adapted to enclose the connector housing, the shroud having an
8 electrically conductive first end to electrically contact the chassis and a cable engagement body
9 having an inner opening to receive the cable, the cable engagement body having an inner surface
10 in contact with an outer surface of the cable,
11 wherein the cable comprises an outer insulating layer, and wherein the inner
12 surface of the cable engagement body is capacitively connected to the cable shield through at
13 least the outer insulating layer,
14 wherein the shroud is formed of an electrically conductive material, and wherein
15 the shroud is adapted to cooperate with the chassis and the cable shield to prevent
16 electromagnetic leakage;
17 an attachment mechanism adapted to attach the shroud to the chassis; and
18 an electromagnetic interference gasket in contact with a surface of the shroud, the
19 shroud to electrically contact the chassis through the electromagnetic gasket.

1 15. (Original) The connector assembly of claim 14, wherein a capacitive impedance
2 is provided between the cable engagement body and the cable shield in response to transmission
3 of a signal at a predetermined frequency in the cable.

Appln. Serial No. 09/881,464
Amendment Dated November 10, 2004
Reply to Office Action Mailed September 21, 2004

1 16. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 shroud defines a chamber in which the connector is located, the width of the inner opening being
3 less than a width of the chamber.

1 17. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 cable engagement body has a predetermined length, the cable engagement body surrounding a
3 portion of the cable along the predetermined length.

1 18. (Cancelled)

1 19. (Currently Amended) ~~The connector assembly of claim 18, further comprising A~~
2 connector assembly for mating with a port in a chassis, comprising:
3 a connector having a housing formed of an electrically conductive material, the
4 connector adapted to mate with the port;
5 a cable extending from the connector, the cable having a shield, wherein the
6 connector housing is electrically connected to the shield of the cable;
7 a shroud adapted to enclose the connector housing, the shroud having an
8 electrically conductive first end to electrically contact the chassis and a cable engagement body
9 having an inner opening to receive the cable, the cable engagement body having an inner surface
10 in contact with an outer surface of the cable, the cable engagement body further having an
11 element to electrically contact the shield of the cable;
12 an attachment mechanism adapted to attach the shroud to the chassis; and
13 an electromagnetic interference gasket in contact with a surface of the shroud to
14 enhance the electrical contact between the shroud and the chassis.

1 20. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 cable has an outer insulating jacket, and the cable engagement body has at least one piercing
3 element protruding from the inner surface of the cable engagement body, the piercing element
4 adapted to penetrate the outer jacket of the cable to electrically contact the cable shield.

Appln. Serial No. 09/881,464

Amendment Dated November 10, 2004

Reply to Office Action Mailed September 21, 2004

1 21. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 connector comprises one or more contacts contained in the connector housing.

1 22. - 23. (Cancelled)

1 24. (Currently Amended) A method of reducing electromagnetic interference,
2 comprising:
3 ~~providing~~ mating a connector having a housing to a port in a chassis;
4 electrically contacting the connector housing to a shield of a cable;
5 enclosing the connector within an electrically conductive shroud; and
6 contacting an inner surface of a portion of the shroud to an outer surface of the
7 cable extending from the connector; [[and]]
8 electrically connecting the portion of the shroud to the cable shield,
9 wherein the shroud cooperates with the cable shield to prevent electromagnetic
10 leakage;
11 attaching the shroud to the chassis with an attachment mechanism; and
12 electrically contacting the shroud to the chassis with an electromagnetic
13 interference gasket.

1 25. - 26. (Cancelled)

1 27. (Previously Presented) The method of claim 24, wherein electrically connecting
2 the portion of the shroud to the cable shield comprises penetrating, with a piercing element, an
3 outer jacket of the cable, the piercing element being electrically conductive to electrically
4 connect the shroud portion and the cable shield.

1 28. (Previously Presented) The method of claim 24, further comprising removing at
2 least a portion of an outer jacket of the cable to enable the shroud portion to contact the cable
3 shield.

Appln. Serial No. 09/881,464

Amendment Dated November 10, 2004

Reply to Office Action Mailed September 21, 2004

1 29. (Currently Amended) A system comprising:
2 a chassis having a structure defining a port;
3 a connector adapted to mate with the port;
4 a cable extending from the connector, the cable having a shield, the connector
5 having a housing electrically connected to the shield; [[and]]
6 an electrically conductive shroud enclosing the connector, the shroud electrically
7 connected to the shield of the cable;
8 an attachment mechanism adapted to attach the shroud to the chassis; and
9 an electromagnetic interference gasket to enable electrical contact between the
10 shroud and the chassis.

1 30. (Original) The system of claim 29, wherein the shroud has a portion defining a
2 bore surrounding an outer surface of the cable.

1 31. (Cancelled)

1 32. (Previously Presented) The system of claim 30, wherein the shroud portion
2 comprises a neck portion.

1 33. (Previously Presented) The shield assembly of claim 1, wherein the cover has an
2 outwardly extending flange, the gasket adapted to be positioned between the flange and the
3 chassis.

1 34. (Previously Presented) The shield assembly of claim 1, wherein the cable
2 engagement body has an electrically conductive element adapted to pierce through an outer
3 insulating jacket of the cable to enable electrical connection between the cable engagement body
4 and a shield of the cable.

1 35. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 element to electrically contact the shield of the cable comprises a piercing element.

Appl. Serial No. 09/881,464
Amendment Dated November 10, 2004
Reply to Office Action Mailed September 21, 2004

1 36. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 element to electrically contact the shield of the cable comprises plural piercing elements.

1 37. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 element to electrically contact the shield of the cable comprises an electrically conductive inner
3 surface of the cable engagement body.

1 38. - 41. (Cancelled)

1 42. (Previously Presented) The shield assembly of claim 1, wherein the cover defines
2 the chamber having a space to enclose the connector without contacting a housing of the
3 connector.

1 43. (Previously Presented) The shield assembly of claim 1, wherein the cover defines
2 the chamber to enclose the connector that has an electrically conductive housing.

1 44. (Previously Presented) The shield assembly of claim 7, wherein the electrically
2 conductive cover is adapted to cooperate with the chassis and cable shield to prevent
3 electromagnetic leakage.

1 45. (Previously Presented) The shield assembly of claim 34, wherein the electrically
2 conductive cover is adapted to cooperate with the chassis and cable shield to prevent
3 electromagnetic leakage.

1 46. (Currently Amended) The connector assembly of claim [[12]] 19, wherein the
2 shroud is adapted to cooperate with the chassis and cable shield to prevent electromagnetic
3 leakage.

Appln. Serial No. 09/881,464

Amendment Dated November 10, 2004

Reply to Office Action Mailed September 21, 2004

- 1 47. (Previously Presented) The system of claim 29, wherein the shroud cooperates
2 with the chassis and cable shield to prevent electromagnetic leakage.